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PROFILE OF SCIENTIST/RESEARCH WORKER

Name: Dr. Alka Kumari

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Qualification: Ph.D. in Botany

Area(s) of Specialization: Morpho-taxonomy and Ecology of Pteridophytes including

Phytoremediation of polluted sites with ferns.

Occupation/Designation: Scientist (DST)

Major Activities: Bioprospection and inventorization of western Himalayan ferns

Awards/Recognitions: Merit certificate awarded by Indian Fern Society, Chandigarh

Brief Summary of Pteridological Research:

During my Ph. D., I have studied on 'Distribution, Morpho-taxonomy, Ecology and SEM studies of spores of threatened fern Helminthostachys zeylanica (L.) Hook. growing in Indo-Nepal border of Bihar state.' After getting Ph. D I have joined National Botanical Research Institute, Lucknow as research associate and worked on, 'Diversity and distribution of Pteridophytes of Kumaon Himalaya with special reference to threatened taxa.' During this period I have learnt a lot about diversity of ferns including their threat status and ethnobotanical uses. At NBRI, Lucknow I have also started my work on 'Screening of Pteridophytes for phytoremediation of metal loaded industrial wastes.' I have studied the comparative metal accumulation in different ferns growing on fly ash contaminated sites in vicinity of NTPC dumping sites and their metabolic adaptation against metal stress. Currently, I am studying metal binding ability or phytochelatin synthesis and cytotoxicological changes in ferns during metal stress. Beside, I am actively engaged in 'Bioprospection and inventorization of pteridophytes in western Himalaya' our institute's mega project.